

U.S. Representative Gregg Harper

FY 2010

Requests to Agriculture, Rural Development, Food and Drug Administration,
and Related Agencies
Appropriations Subcommittee

Project Name: BioPhotonics, A Novel Molecular Approach to Livestock
Production Systems

Proposed Recipient: Mississippi State University, P.O. Box 9800, Mississippi
State, MS 39762

Amount Requested: \$1,500,000

Project Description: The purpose of this initiative is to develop novel real-time imaging technologies to confront critical issues facing production animal agriculture. As part of this initiative, novel technologies that utilize the photon (light), thermal signatures (heat), and fluorescence will be adapted to molecular-based strategies to permit live animal imaging of specific physiological processes.

Project Name: Corn Germplasm Research

Proposed Recipient: Mississippi State University, P.O. Box 9650, Mississippi
State, MS 39762

Amount Requested: \$1,100,000

Project Description: Cooperative research conducted by USDA-Agricultural Research Service and Mississippi Agricultural and Forestry Experiment Station will identify additional corn germplasm that can serve as useful sources of genes for resistance to aflatoxin contamination. Aflatoxin contamination is a major food and feed safety problem frequently associated with corn production in the South.

Project Name: Culley-Brashear Flood Control Project

Proposed Recipient: City of Ridgeland, P.O. Box 217 Ridgeland, MS 39158

Amount Requested: \$1,500,000

Project Description: The purpose of this project is to reduce the amount of flooding caused by Brashear-Culley Creek at Rice Road and the Natchez Trace Parkway.

Project Name: Genomics for Southern Crop Stress and Disease

Proposed Recipient: Mississippi State University, P.O. Box 9800, Mississippi
State 39762

Amount Requested: \$1,140,000

Project Description: Mississippi State University will provide innovative genomics research solutions to address disease and climatic stress-ors in Mississippi's most valuable commodity crops. Forestry, Poultry, Catfish, and many more Mississippi industries will benefit from this research. Advances in understanding genomic responses to stress and disease are anticipated to have a beneficial impact on yields, costs, and environmental sustainability.

Project Name: Catfish Health Initiative

Proposed Recipient: Mississippi State University, P.O. Box 9800, Mississippi State, MS 39762

Amount Requested: \$822,350

Project Description: This initiative supports a multi-disciplinary program to address industry needs through improvements in diagnostic services and research on basic, applied, and clinical problems. In the last decade, incidence and mortality rates of infectious diseases have escalated dramatically as culture practices have become more intensive and previously rare diseases have been amplified within relatively closed populations of cultured fish.

Project Name: City of Jackson Drainage

Proposed Recipient: City of Jackson, 219 South President Street, Jackson, MS 39205

Amount Requested: \$987,000

Project Description: This project involves implementation of erosion control measures and replacement or stabilization of storm culverts and sewer crossings. Among the critical areas most affected by Jackson's major drainage problem and due to receive funding in this project phase are Eubanks Creek (Tributary 4) and White Oak Creek.

Project Name: Biomass-Based Energy Research

Proposed Recipient: Mississippi State University, P.O. Box 9800, Mississippi State, MS 39762

Amount Requested: \$1,200,000

Project Description: The Consortium is developing a unique gasification-catalytic process that utilizes all of the plant biomass, including the lignin, to produce liquid fuel. Mississippi State University and Oklahoma State University will cooperate in conducting technical and economic evaluation for the gasification-catalytic conversion process. Currently, MSU is conducting research to develop new catalysts to improve the conversion of syngas into liquid hydrocarbons.

Project Name: Wood Utilization Research Program

Proposed Recipient: Mississippi State University, P.O. Box 9680, Mississippi State, MS 39762

Amount Requested: \$7,000,000

Project Description: Mississippi State University will conduct vital research and education on wood use to support the competitiveness of small and medium wood product manufacturers and the needs of the public through the Wood Utilization Research (WUR) Program. 12 Wood Utilization Research Centers at state universities across the U.S. will participate in this program. Mississippi has the potential to economically grow much larger volumes of wood. Focused research is essential to enhance the development of the current industry and to create new wood-based industries such as that of energy and chemicals.